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a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449		
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b		
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract		
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs		
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other		

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TITLE OF INVENTION

IMPROVED VACUUM COLLECTION BAG AND METHOD OF OPERATION

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BACKGROUND OF INVENTION THIS APPLICATION IS A CONTINUATION OF 09/847,808 (5/2/01) NOW ARAWDONED WHICH CLAIMS BENEFIT OF 60/201,654 (05/03/200) AUT CLAIMS BENEFIT OF 1. Field of Invention 60/268,183 (02/12/2001).

The present invention relates to collection bags in appliances, such as a vacuum

cleaner.

2. Description of Related Art

A variety of vacuum cleaners are presently available that collect dirt in a disposable paper bag filter. These vacuum cleaners are found in several forms including upright, canister, and wet/dry vac configurations. These device are sold under the brand names Hoover, Eureka, Royal Dirt Devil, Panasonic, Sanyo, Sears Kenmore, SHOP-VAC, Sears Craftsman, Ridgid, Genie, etc.

The majority of vacuum cleaners purchased today utilize a porous paper bag to filter and store dust collected by a vacuum cleaner. As air pneumatically conveys dirt into the bag, it exits through the porous paper media surrounding the cavity leaving the large dirt in the bag. Because of the relatively poor filtration efficiency of paper filter media, better vacuum cleaners employ multi-stage filtration systems that generally employ a HEPA backup filter to capture fine dust that penetrates through the paper bag filter. Lower-end vacuum cleaners have no backup filter and since consumers cannot retrofit their vacuum cleaner with a backup filter, they must suffer with dust emissions from their vacuum cleaners. Vacuum cleaners employing paper bag filters without backup filters provide such poor filtration that fine dust can be visually found accumulating on the inside of the vacuum cleaner housing that encompasses the paper bag filter. These dust emissions can also reduce the vacuum cleaner's life by contaminating the motor in the suction device.

The filtration efficiency of a paper vacuum cleaner bag of the prior art is also reduced due to the design of the bag. In most paper vacuum cleaner bags the dirt enters the bag inlet at a high velocity and the dirt impacts the opposite wall of the bag. Thus the

Patent Application of John J. Scanlon, 1308 Hillside Boulevard, Wilmington, Delaware 19803, entitled Vacuum Collection Bag and Method of Operation, dated 11 February 2002, 27 pages Specification and 18 pages Drawings. Reference Provisional Patent Applications 60/201,654 filed 3 May 2000 and 60/268,183 filed 13 February 2001.



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ADDRESS John J. Scanlon 1308 Hillside Blvd Wilmington ,DE 1									
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